

## setTransform() METHOD IN HTML5 CANVAS

- The setTransform() method is used to resets the current transform to the identity matrix.
- It runs transform() with the same arguments.
- The setTransform() method is used to scale, rotate, move, and skew the context

### Syntax for setTransform() method in HTML5 Canvas:

```
context.setTransform(a,b,c,d,e,f);
```

### Parameter Values for setTransform() method in HTML5 Canvas:

Parameter	Description
a	Horizontal scaling
b	Horizontal skewing
c	Vertical skewing
d	Vertical scaling
e	Horizontal moving
f	Vertical moving

## Sample Coding for setTransform() method in HTML5 Canvas:

```
<!DOCTYPE html>
<html>
  <head>
    <title>wikitechy-setTransform() Method in canvas</title>
  </head>
  <body>
    <h1>wikitechy-setTransform() Method in canvas</h1>
    <canvas id="wikitechyCanvas" width="400"
      height="250" style="border:1px solid #d3d3d3;">
    </canvas>
    <script>
      var canvas = document.getElementById("wikitechyCanvas");
      var context = canvas.getContext("2d");

      context.fillStyle = "skyblue";
      context.fillRect(10, 10, 250, 100);

      context.setTransform(4,0.5, -0.5, 1, 30, 15);
      context.fillStyle = "pink";
      context.fillRect(0, 0, 250, 100);

      context.setTransform(1,0.5, -0.5, 1, 30, 10);
      context.fillStyle = "blue";
      context.fillRect(0, 0, 250, 100);
    </script>
  </body>
</html>
```

## Code Explanation for setTransform() method in HTML5 Canvas:

```
<!DOCTYPE html>
<html>
  <head>
    <title>wikitechy-setTransform() Method in canvas</title>
  </head>
  <body>
    <h1>wikitechy-setTransform() Method in canvas</h1>

    <canvas id="wikitechyCanvas" width="400"
      height="250" style="border:1px solid #d3d3d3;">
    </canvas>
    <script>
      var canvas = document.getElementById("wikitechyCanvas");
      var context = canvas.getContext("2d");

      context.fillStyle = "skyblue";
      context.fillRect(10, 10, 250, 100);

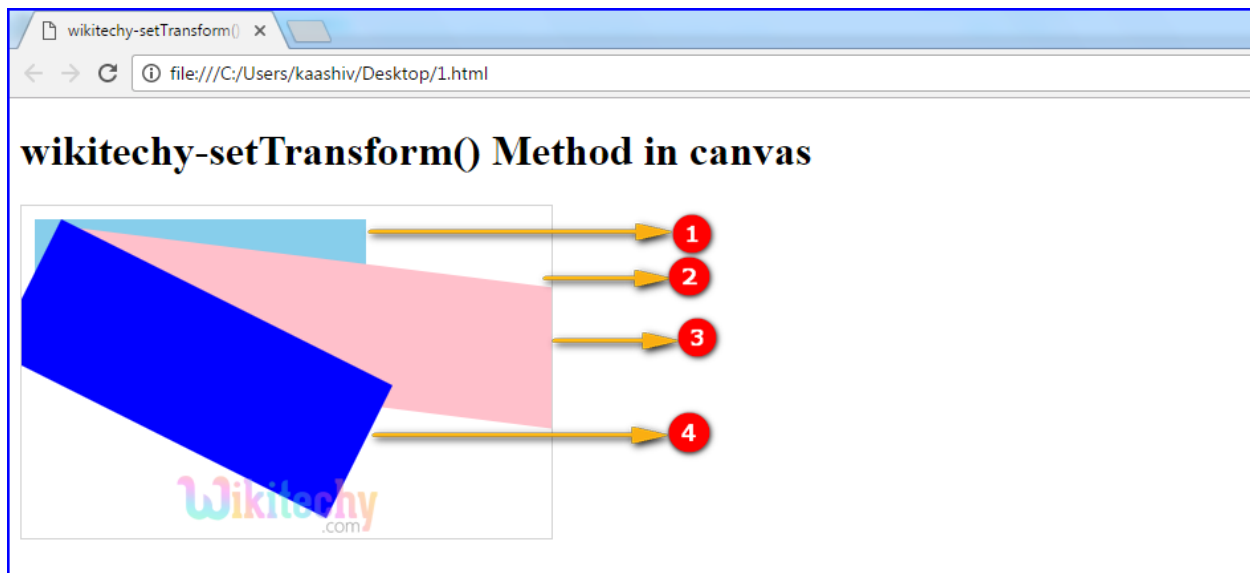
      context.setTransform(4,0.5, -0.5, 1, 30, 15);
      context.fillStyle = "pink";
      context.fillRect(0, 0, 250, 100);

      context.setTransform(1,0.5, -0.5, 1, 30, 10);
      context.fillStyle = "blue";
      context.fillRect(0, 0, 250, 100);
    </script>
  </body>
</html>
```

1. "**WikitechyCanvas**" is used to declare the id value of the canvas tag.

2. The **getElementById()** method is used to get the element with the specific id ("wikitechyCanvas").
3. **canvas.getContext** method returns an object that provides methods and properties for drawing on the canvas
4. The **context.fillStyle()** method is used to fill a **skyblue** color to the rectangle.
5. The **context.fillRect()** method is used to draws a "filled" rectangle **(10,10,250,100)** in (x0,y0,x1,y1).
6. The **context.setTransform()** method is used to "setTransform" a diagram **(4,0.5, -0.5, 1, 30, 15)** in (a,b,c,d,e,f)
7. The **context.fillStyle()** method is used to fillstyle of a diagram (pink color rectangular box)
8. The **context.fillRect()** method is used to draws a "filled" rectangle **(0,0,250,100)** (x0,y0,x1,y1)
9. The **context.setTransform()** method is used to "settransform" a diagram **(1, 0.5, -0.5, 1, 30, 10);** (a,b,c,d,e,f)
10. The **context.fillstyle()** method is used to fillstyle of a diagram (blue color rectangular box)
11. The **context.fillRect()** method is used to draws a "filled" rectangle **(0, 0, 250, 100);** in (x0,y0,x1,y1)

## Output for setTransform() method in HTML5 Canvas:



1. The rectangle is drawn with this parameter (0,0,250,200) and filled with skyblue color.
2. <canvas>tag is used to draw a rectangle with gray color border.
3. The rectangle is drawn with this parameter (0,0,250,100) and filled with pink color
  - `context.setTransform (4,0.5, -0.5, 1, 30, 15);`
4. The rectangle is drawn with this parameter (0,0,250,100)and filled with blue color

- `context.setTransform (1, 0.5, -0.5, 1, 30, 10);`

### Browser Support for setTransform() Method in HTML5 Canvas:

Browser	Support
Chrome	Yes
Internet explorer / Edge	9.0
Firefox	Yes
Safari	Yes
Opera	Yes

#### Tips and Notes

- The transformation will only affect drawings made after the `setTransform()` method is called.